FIELD SAMPLING PLAN
FOR THE
PLASTECH ENGINEERED PRODUCTS, INC. SITE
ANDOVER, ASHTABULA COUNTY, OHIO

Prepared for
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Prepared by
WESTON SOLUTIONS, INC.
Region V Superfund Technical Assessment and Response Team

August 24, 2012

Approved by: L. Muller Date: 8/29/12
U.S. EPA Region V
On-Scene Coordinator

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ACRONYM LIST

CFR	Code of Federal Regulations
COC	Contaminant of Concern
EPA	Environmental Protection Agency
ERB	Emergency Response Branch
FSP	Field sampling plan
MS/MSD	Matrix Spike/ Matrix Spike Duplicate
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEDO	Northeast District Office
NOV	Notice of Violation
OSC	On-Scene Coordinator
PCB	Polychlorinated Biphenyls
PPE	Personal Protective Equipment
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
SOP	Standard Operating Procedure
START	Superfund Technical Assessment and Response Team
SVOC	Semi-volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Protocol
U.S. EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
WESTON	Weston Solutions, Inc.

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1.0 Introduction

This Field Sampling Plan (FSP) identifies the data collection activities and associated quality assurance/quality control (QA/QC) measures specific to the Plastech Engineered Products, Inc. site (the "Site"). The Site is located in a mixed residential and rural area at 205 Maple Street Extension in Andover, Ashtabula County, Ohio 44003 (**Figure 1**).

All data will be generated in accordance with the quality requirements described in the *Superfund Technical Assessment and Response Team (START) III Generic Quality Assurance Project Plan (QAPP)*, dated June 2006. The purpose of this FSP is to describe site-specific tasks that will be performed in support of the stated objectives. The FSP will reference the QAPP for generic tasks common to all data collection activities including routine procedures for sampling and analysis, sample documentation, equipment decontamination, sample handling, data management, assessment, and data review. Additional site-specific procedures and/or modifications to procedures described in the *START III Generic QAPP* are described in the following FSP elements.

This FSP is prepared, reviewed, and approved in accordance with the procedures detailed in the *START III Generic QAPP*. Any deviations or modifications to the approved FSP will be documented using **Table 1: FSP Revision Form.**

2.0 Project Management, FSP Distribution, and Project Team Member List

Management of the Site will be as documented in the *START III Generic QAPP*. Refer to the *START III Generic QAPP* for an organizational chart, communication pathways, personnel responsibilities and qualifications, and special personnel training requirements.

The following personnel will be involved in planning and/or technical activities performed for this data collection activity. Each will receive a copy of the approved FSP. A copy of the FSP will also be retained in the site file.

Personnel	Title	Organization	Phone Number	Email
Lori Muller	OSC	U.S. EPA	(440)250-1735	Muller.Lori@epamail.epa.gov
Ryan Green	Project Manager	START	(440) 202-2811	Ryan.Green@Westonsolutions.com
David Robinson	Health and Safety	START	(937) 531-4405	David.Robinson@Westonsolutions.com
Lisa Graczyk	QA Reviewer	START	(312) 424-3339	LGraczyk@Dynamac.com

NOTES:
OSC – On-Scene Coordinator
QA – Quality Assurance
START – Superfund Technical Assessment and Response Team
U.S. EPA – United States Environmental Protection Agency

3.0 Planning and Problem Definition

3.1 Problem Definition

Ohio Environmental Protection Agency (Ohio EPA) Northeast District Office (NEDO) personnel documented the following conditions at the Site in June 2012:

- Eight 55-gallon drums with unknown contents; one was labeled as "Corrosive."
- Twenty 5-gallon pails with unknown contents; one labeled "Oxidizer."
- Three partially dismantled transformers on-site; two were observed to be leaking.
- Two in-floor sumps and trench drains containing paint and/or solvent waste.
- Large piles of surface debris containing wooden pallets, plastic debris, and unknown solid wastes.
- Fluorescent lamp bulbs throughout the building.
- Unrestricted access to the Site and evidence of trespassing within the building.

The Ohio EPA referred the Site to U.S. EPA Region 5 Emergency Response Branch (ERB). The U.S. EPA on scene coordinator (OSC) has tasked START to assist with sampling the following:

- Up to 8 liquid waste samples from 55-gallon drums;
- Up to 2 liquid samples from in-floor sumps;
- Up to 3 samples of oil from transformers; and
- Up to 1 liquid waste sample from a 5-gallon pail with oxidizer labeling.

3.2 Site History and Background

The Site is located in a mixed residential and rural area at 1810 Maple Street Extension, in Andover, Ashtabula County, Ohio (**Figure 1**). The Site coordinates are 41.612783 degrees North latitude and -80.568731 degrees West longitude. The former Plastech Andover facility is an abandoned manufacturing complex. The facility consists of approximately 274,000 square feet of buildings located on approximately 20 acres of property (**Figure 2**). The Site is bounded by residential properties to the south, light industry and residential properties to the west, and a wooded area to the north and east. Approximately 51 people reside within a half-mile and 228 people reside within one-mile of the site. The Site is currently unrestricted and susceptible to vandalism.

On February 1, 2008, Plastech Engineered Products, Inc. (Plastech) filed for bankruptcy. In February 2009, the Ohio EPA attempted to work with Trusted Partner LLC, an entity who purchased the assets of the former Plastech facility, to remove regulated substances. In February 2010, a limited amount of regulated substances were removed. On June 15, 2010, the Ohio EPA issued a Notice of Violation (NOV) for non-removal violations. No response was received concerning the NOV letter. The Ohio EPA continued to monitor the former facility with the intention of working with any prospective buyer of the property to address the outstanding

issues.

On June 13, 2012, the Ohio EPA conducted an inspection of the facility which revealed regulated substances consisting of paints and solvents, containers labeled as Corrosive and Oxidizer, and leaking oil-filled electrical transformers. In addition, the site was unsecured and evidence of vandalism was observed at the former facility.

No assessment activities have been completed on the regulated substances identified during the June 13, 2012, inspection due to property access-related issues. However, it is suspected that hazardous wastes are located at the Site.

3.3 Contaminants of Concern/Target Analytes

Samples will be submitted to an off-site laboratory for analysis of the following:

Drums (8)and In-floor Sumps (2) Samples

- Flashpoint
- pH
- Toxicity Characteristic Leaching Protocol (TCLP) Volatile Organic Compounds (VOCs)
- TCLP Semi-volatile Organic Compounds (SVOCs)
- TCLP Metals

Transformers (3) Samples

- Polychlorinated Biphenyls (PCBs)

5-Gallon Pail (1) Samples

- pH

4.0 Project Description and Schedule

The following tasks were requested by the U.S. EPA OSC and are anticipated to be conducted on August 29, 2012:

Task 1 – Initial Walkthrough and Container Inventory

- Mobilize three START personnel to document the number, type, condition, and labeling of containers stored at the Site.
- Document other Site conditions that may pose threats to human health or the environment.

Task 2 – Drum, Tank, Transformer, and Container Sampling

- Mobilize three START personnel and equipment for Level B sampling of unknown waste chemicals in up to 8 55-gallon drums, , 2 in-floor sumps,1 5-gallon pail, and 3 transformers

- Ship samples to the designated laboratory for analysis.

Sample labels and chain-of-custody (COC) paperwork will be generated by START. Samples will be packaged and shipped or delivered to the designated laboratory. The turnaround time for the preliminary sample data will be two weeks. A START chemist will review the final laboratory data package and produce a validation report. A Site Assessment report summarizing the sampling results and other findings will be submitted to the U.S. EPA OSC within 30 days of receipt of analytical data.

5.0 Project Quality Objectives

5.1 Project Objectives

The U.S. EPA OSC and START designed the Site-specific sampling strategy in this FSP to determine if the uncontrolled waste at the Site poses a potential threat to human health and the environment based on guidance in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Code of Federal Regulations (CFR) Title 40 Part 300.415(b)(2). The objective is to obtain a representative number of samples and sufficient analytical data for the U.S. EPA to evaluate the need for a Removal Action at the Site.

The following is a list of project objectives that apply to the site assessment:

- To determine whether a removal action is warranted and if so whether the response should be classified as an emergency, time-critical, or non-time critical removal action.

- To rapidly assess and evaluate the urgency, magnitude, extent and impact of a release, or threatened release, of hazardous substances, pollutants or contaminants, and their impact on human health and/or the environment.

- To assess air quality to determine the level of personal protective equipment that must be used by site workers and the potential threat to human health.

- To supply the Ohio EPA or other applicable Federal, State, and Local agencies with information about the nature and magnitude of any health threat and to support subsequent public health advisories.

- To determine a remedy to eliminate, reduce, or control risks to human health and the environment and to support an "Action" decision memorandum documenting the identified removal approach.

More information about the sampling procedures to support these objectives is provided in Section 6.

5.2 Measurement and Performance Criteria

Generic measurement and performance criteria described in the *START III Generic QAPP* will be used. These criteria will ensure that data are sufficiently sensitive, precise, accurate, and

representative to support site decisions.

5.3 Data Quality Objectives

Data quality objectives address requirements that include when, where, and how to collect samples; the number of samples; and the limits on tolerable error rates. These steps should periodically be revisited as new information about a problem is learned.

Analytical data must meet all requirements for comparison to the following regulations:

Liquid and Solid Wastes from Drums and Tanks

- 40 CFR 261, Identification and Listing of Hazardous Waste

6.0 Sampling Design

This section describes the sampling procedures, sample numbering system, and management of investigation-derived wastes.

6.1 Sampling Procedures

Task 1 – Initial Walkthrough and Container Inventory

START personnel will collect written and photographic documentation of containers and Site conditions. Labels, counts, and types of containers at the Site will be recorded on a handwritten log sheet during the site assessment activities and transferred to a dedicated Site logbook. The volumes of containerized wastes will be estimated or visually approximated whenever possible. Field screening and air monitoring will be conducted with a MultiRAE Plus 5-gas monitor and a Ludlum Micro-R radiation meter. Appropriate levels of personal protective equipment (PPE) will be worn based on field screening and air monitoring results.

Task 2 – Drum, Tank, Transformer, and Container Sampling

Up to 8 drums, 1 pail, 2 in-floor sumps, and 3 transformers have been selected for sample collection. START personnel will don Level B PPE prior to sampling and opening unknown drums and tanks with non-sparking tools. Liquid samples will be tested with pH paper during sampling. Drum and tank headspace will be screened with the MultiRAE Plus 5-gas monitor which is outfitted with a photoionization detected for measuring organic vapors.

Liquid contents will be collected using glass drum thieves or polypropylene bailers. Sample material will be transferred into laboratory-provided glass containers and stored in a cooler on ice. Samples will be hand-delivered to the designated laboratory on the day of collection.

Laboratory-specific and method-specific requirements for sample containers, volumes, preservation, and QC samples are presented in the attached Table 2: Sampling and Analysis Summary.

6.2 Sample Numbering System

All samples for analysis, including QC samples, will be given a unique sample number. The sample numbers will be recorded in the field logbook and on the COC paperwork.

START will assign each sample its unique number. The sample number highlights the suspected contaminated area and location, and will be used for documentation purposes in field logbooks, as well as for presentation of the analytical data in memoranda and reports. The project samples will be identified using the following format:

Project Identification Code
PL = Plastech Engineered Products, Inc. Site

Sample Type Code
D = Drum
S = In-floor Sump
T = Transformer
P = 5-gallon Pail

Six-Digit Date Code
mmddyy

QA/QC Identification Code
DP = Field duplicate
MS = MS/MSD

Sample ID's will be constructed with the project identification, followed by the sample type code and a unique location or container number, followed by the date code, followed by the QA/QC identification, if applicable.

Examples of the sample identifications are as follows:

- **PL-D08-082912** = waste sample collected from drum number 8 on August 29, 2012.
- **PL-D08-082912-DP** = duplicate of sample PL-D08-082912.
- **PL-S01-082912** = waste sample collected from sump number 1 on August 29, 2012.
- **PL-T02-082912** = waste sample collected from transformer number 2 on August 29, 2012.

6.3 Management of Investigation-Derived Wastes

For purposes of this FSP, investigation-derived wastes are defined as any byproduct of the field activities that is suspected or known to be contaminated with hazardous substances. The performance of field activities will produce waste products, such as spent sampling supplies (*e.g.*, bailers, paper towels, etc.), and expendable PPE.

Disposable drum thieves, bailers, and HDPE scoops will be left in the respective container that was sampled, or placed in trash bags and left next to the sampled container. Other disposable sampling supplies and PPE will be containerized in trash bags to remain on-site pending the receipt of sample laboratory analytical results.

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7.0 Sampling Procedures

7.1 Sampling Standard Operating Procedures

The following Standard Operating Procedures (SOPs) will be used during the site evaluation:

- SOP 401 – Drum Sampling
- SOP 402 – Tank Sampling

7.2 Decontamination Procedures

General decontamination procedures are described in Section B.2 of the *START III Generic QAPP*. All non-disposable equipment (i.e. steel bowls and scoops) will be decontaminated between sampling locations.

8.0 Sample Handling, Tracking, and Custody Procedures

All samples will be identified, handled, shipped, tracked, and maintained under COC, in accordance with the *START III Generic QAPP*.

9.0 Field Analytical Methods and Procedures

9.1 Field Analytical Methods and Standard Operating Procedures

Field screening and personal air monitoring may be conducted with a MultiRAE Plus 5-gas monitor and a Ludlum Micro-R radiation meter. Instrument readings will be recorded in the site log book.

9.2 Field Testing Laboratory

A field testing laboratory will not be used during the site assessment.

9.3 Screening/Confirmatory Analyses

Screening/Confirmatory Analyses will not be used during the site assessment.

10.0 Fixed Laboratory Analytical Methods and Procedures

TestAmerica.
4101 Shuffel Street NW
North Canton, OH 44720
Contact: Mark Loeb
Office: (330) 497-9396

11.0 Quality Control Activities

11.1 Field Quality Control

The number of QC samples collected for each analytical parameter and concentration level are listed in **Table 2: Sampling and Analysis Summary.** The QC sample determination and frequency is in accordance with the *START III Generic QAPP*, Table 4.

11.2 Analytical Quality Control

QC for analytical procedures will be performed at the frequency described in the *START III Generic QAPP*, Tables 5 and 6. In addition, method-specific QC requirements will be used to ensure data quality.

11.3 Performance Evaluation Samples

Performance evaluation samples will not be used in this site assessment.

12.0 Documentation, Records, and Data Management

Documentation, record keeping, and data management activities will be conducted in accordance with the *START III Generic QAPP*, Section B.10.

13.0 Quality Assurance Assessment and Corrective Actions

Field activities are anticipated to require one day for completion; no long-term project field audit will be completed at this time.

14.0 Reports to Management

Reports to management will be written and distributed in accordance with the *START III Generic QAPP,* Section C.

15.0 Steps 1, 2 and 3: Data Review Requirements and Procedures

Step 1: Data collection activities, including sample collection and data generation, will be verified in accordance with the *START III Generic QAPP*, Section D.

Step 2: Data will be validated by WESTON START.

Step 3: Data will be reviewed for usability in accordance with the *START III Generic QAPP*, Section D.

TABLES

Table 1
FSP Revision Form

Site: Plastech Engineered Products, Inc. Site Assessment
OSC: Lori Muller
TDD: S05-0001-1208-008

Date	Revision Number	Proposed Change to FSP/QAPP	Reason for Change of Scope/Procedures	FSP Section Superseded	Requested By	Approved By

Table 2
Sampling and Analysis Summary

Site: Plastech Engineered Products, Inc. Site Assessment
OSC: Lori Muller
TDD: S05-0001-1208-008

Matrix	Analytical Parameter	Analytical Method	Containers (Numbers, Size, and Type)	Preservation Requirement	Number of Sampling Locations	Number of Field Duplicates	Number of MS/ MSDs[2]	Number of Blanks (Trip, Field, Equipment Rinsate)[1]	Total Number of Samples to Lab[3]	Holding Time
Liquid Waste	Flashpoint	1010/1020	1 4-oz glass	Cool to 4°C	10	1	1	0	11	As soon as possible
Liquid Waste	pH	9045C	1 4-oz glass	Cool to 4°C	11	1	1	0	12	
Liquid Waste	TCLP VOC	8260B	1 4-oz glass	Cool to 4°C	10	1	1	0	11	14 days
Liquid Waste	TCLP SVOC	8270C	1 4-oz glass	Cool to 4°C	10	1	1	0	11	14 days
Liquid Waste	TCLP Metals	6010/7471A	1 4-oz glass	Cool to 4°C	10	1	1	0	11	180 days; 28 days for mercury
Liquid Waste	PCB Aroclor	8082	1 4-oz glass	Cool to 4°C	3	1	0	0	4	14 days

Notes:
[1] Trip blanks are only required for VOCs in water samples.
[2] For the water samples designated for MS/MSDs, triple volume is required for VOCs and double volume for other water parameters.
[3] Total number of samples to the laboratory does not include MS/MSD samples.

°C – Degrees Celsius
MS/MSD – Matrix Spike/Matrix Spike Duplicate
oz – Ounce
PCB – Polychlorinated Biphenyl
SVOC – Semivolatile Organic Compound
TCLP – Toxicity Characteristic Leaching Procedure
VOA – Volatile Organic Analysis
VOC – Volatile Organic Compound

FIGURES